

## Patent claims

1. A method for selecting resources in communication networks (ISDN, VoIP), particularly in packet-switching  
5 networks (VoIP), having communication components (A1 - A4, B1 - B11, C1 - C3, S1, S2) which use the resources in the network,  
where a plurality of resources provide the communication components (A1 - A4, B1 - B11, C1 - C3,  
10 S1, S2) with the same function,  
characterized in that
- the functions and statements about the performance of a plurality of or all resources are ascertained and stored by a communication component (A1 - A4,  
15 B1 - B11, C1 - C3, S1, S2),
  - when a resource is being used by a communication component (A1 - A4, B1 - B11, C1 - C3, S1, S2) at least one database is used to store resource-specific information about the use of this  
20 resource, and
  - the stored functions and statements and/or the resource-specific information stored in the database are used to select the resource.
- 25 2. The method as claimed in claim 1,  
characterized  
in that information sent by the resources is statistically evaluated and stored for the purpose of storing the resource-specific information.
- 30 3. The method as claimed in claim 1 or 2,  
characterized  
in that the resource-specific information stored is information about the reliability and/or safety and/or  
35 availability and/or the costs for use of the resource.



- 14 -

4. The method as claimed in one of the preceding claims,  
characterized  
in that the resource-specific information stored by a  
5 communication component (A1 - A4, B1 - B11, C1 - C3, S1, S2) can be provided for other communication components (A1 - A4, B1 - B11, C1 - C3, S1, S2).
5. The method as claimed in one of the preceding  
10 claims,  
characterized  
in that the resources are the useable services of communication components (A1 - A4, B1 - B11, C1 - C3, S1, S2).
- 15 6. The method as claimed in one of the preceding claims,  
characterized in that  
at least one of the communication components (A1 - A4,  
20 B1 - B11, C1 - C3, S1, S2) has an integrated search function for ascertaining the addresses of resources of further communication components (A1 - A4, B1 - B11, C1 - C3, S1, S2).
- 25 7. The method as claimed in one of the preceding claims,  
characterized in that  
the reaction times of the resources are taken into account for the statement about the performance.
- 30 8. The method as claimed in one of the preceding claims,  
characterized in that  
information about the present utilization level or  
35 about the remaining capacity of the resource is taken into account for the statement about the performance.
9. The method as claimed in one of the preceding



- 14a -

claims,  
characterized  
in that if a resource which is being used by the  
communication component (A1 - A4, B1 - B11, C1 - C3,  
5 S1, S2) fails then the communication component selects  
the next available resource with the same function for  
further use.



- 15 -

10. The method as claimed in one of the preceding claims,

characterized

in that the functions and/or the statements about the  
5 performance of a plurality of or all resources are  
repeatedly ascertained immediately after the  
communication component (A1 - A4, B1 - B11, C1 - C3,  
S1, S2) has been turned on and/or at stipulated  
intervals of time.

10

11. A computer program product for carrying out one of  
the aforementioned methods,

characterized by

- 15 - a module for finding the addresses of further  
communication components (A1 - A4, B1 - B11, C1 -  
C3, S1, S2),
- a module for checking the availability and for  
ascertaining the performance of resources,
- a module which, when a resource in at least one  
20 database is being used, stores resource-specific  
information about the use of this resource, and
- a module for selecting a resource on the basis of  
the information checked and/or the resource-  
specific information stored in the database.